



A.D. 1810 N° 3331.

S P E C I F I C A T I O N

OF

WILLIAM CLERK.

STOVES AND FIRE-PLACES FOR
DWELLINGS, &c.

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Stoves and Fire-places for Dwellings, &c.

CLERK'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, WILLIAM CLERK, Esquire, Advocate, sends greeting.

WHEREAS the King's most Excellent Majesty, by Letters Patent Patent under the Great Seal of the United Kingdom of Great Britain and Ireland, 5 bearing date the Second day of May, in the fifteenth year of His reign, gave and granted unto the said William Clerk, his executors, administrators, and assigns, His Majesty's special licence, full power, sole privilege and authority, that he, the said William Clerk, his executors, administrators, and assigns, and every of them, by himself and themselves, or by his or their deputy or deputies, servants 10 or agents, as he, the said William Clerk, his executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term of years therein expressed, should and lawfully might make, use, exercise, and vend, his Invention for "PREVENTING SMOKE, DUST, AND THE DANGER OF FIRE, AND FOR ENCREASING AND REGULATING HEAT 15 FROM STOVES AND CHIMNEY FIRE-PLACES, FOR HEATING ROOMS, HALLS, PASSAGES, AND STAIRCASES IN PUBLIC BUILDINGS AND DWELLING-HOUSES, AND ALL OTHER APARTMENTS WHERE REGULATED HEAT AND CLEANLINESS ARE DESIRABLE, WITHOUT OBSTRUCTING THE VIEW OF THE BURNING FUEL," within that part of the United Kingdom

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of Great Britain and Ireland called England, the Dominion of Wales, and Town of Berwick upon Tweed, in such manner as to him, the said William Clerk, his executors, administrators, and assigns, or any of them, should in his or their discretion seem meet; in which said Letters Patent is contained a proviso that if the said William Clerk should not particularly 5 describe and ascertain the nature of his said Invention, and in what manner the same is to be performed, by an instrument in writing under his hand and seal, and cause the same to be enrolled in His Majesty's High Court of Chancery within six calendar months next and immediately after the date of the said Letters Patent, that then the said Letters Patent, and all liberties and advantages 10 whatsoever thereby granted, should utterly cease, determine, and become void, anything therein contained to the contrary thereof notwithstanding.

NOW KNOW YE, that the said William Clerk doth, by this instrument in writing under his hand and seal, duly executed, describe and ascertain the nature of his said Invention, and the methods by which the same may be per- 15 formed, that is to say:—

The said Invention is susceptible of various forms and modifications, according to the particular nature and situation of the apartments, or the particular situation and form of the place in which the stove or grate is to be placed, as, for instance, first when the grate or stove is to be placed near the wall 20 of an apartment or within an ordinary fire-place; the grate for containing the fuel is to be inclosed, excepting on the side towards the apartment, with upright plates of iron or other suitable material, and covered on the top with another plate of the same material, having a pipe or aperture on or near the top of proper diameter for conveying the smoke of the fire into the chimney, 25 and excepting by this pipe or aperture, there ought to be no ordinary access of air into the chimney. On the front, which thus remains open towards the apartment, and accurately fitted to the sides and top above described, is to be placed a frame of metal or other proper material, having various bars and subdivisions, with proper grooves in each, into which are nicely fitted pieces of 30 glass of proper form and size. In its simplest form this frame or screen is constructed of upright bars, crossed or chequered with other bars in a horizontal or other form, into the openings of which the glass is fitted, or having the pieces of glass so accurately cut, and brought so exactly into contact with one another at the upper and under edges, as to supersede the necessity of any 35 cross or horizontal bars. For the purposes of ornament, and without impeding its utility, the frame or screen may be constructed in imitation of a Gothic shrine, or in various fanciful and elegant forms, having the pieces of glass

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either plain or cut, stained or painted. The frame of glass ought not to be placed nearer the grate than nine or ten inches, and the pieces of glass ought not in that case, nor in general, to exceed three inches square, otherwise the glass is apt to crack or break, but in these respects considerable varieties are
5 admissible, provided the size of the pieces of glass bears a due proportion to the distance of the frame from the bars of the grate, and to the greater or less intensity of the heat to which the glass is exposed. The frame is so constructed as either to be occasionally removed altogether or to open totally or in part, by means either of hinges or sliding grooves, or otherwise, so as to give access
10 when necessary to the fire-place. In order to supply the fire within the stove with air two different expedients are employed, either separately or alternately. In the first place, by means of a tube with a valve or stop-cock, communicating between the interior of the stove and the external air, or the air of some contiguous apartment, the fire is supplied independently altogether of the air
15 of that apartment which it is intended to warm. Or, in the second place, in the lower part of the screen nearest to the hearth, or in the sides of the stove, an aperture is made, having a proper regulator or damper, which may be opened or shut at pleasure. In this last manner the fire may be entirely supplied with air from the apartment where it is placed, or if the valve of the
20 tube in the first method be partially or totally opened, the supply may be furnished partly from the apartment and partly from the external air, or the alternate accumulation of heated air and renewal of cool and fresher air in the apartment, may be managed and regulated at pleasure. The effects and advantages of this Invention, when thus applied, are various. In the first
25 place, it has the effect of heating the apartments more easily and equably than by open fire-places, by admitting of an accumulation of air heated by immediate contact with every part of the stove, as well as by radiation from the body of the stove, and through the diaphanous screen which is placed in front of it, while at the same time this accumulation may be occasionally checked or
30 diminished, and a gentle or regulated ventilation may be had by means of the aperture with its damper in the lower part of the stove, or even by opening the screen by means of its hinges or sliding grooves. Next, a fire-place thus constructed effectually prevents all the inconveniences so much felt and complained of occasioned by smoke and dust, as well as the hazards of fire arising
35 from sparks or from the falling of pieces of the burning fuel, while at the same time, and in the third place, the view of the fire is not obstructed, and the cheerfulness and comfort of an open fire-place are retained. It is the combination of this last circumstance with the former which gives to this Invention

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its peculiar character, and its superiority over any species of stove or fire-place now in use. Secondly, when the stove or fire-place is to be situated in the center of an apartment, or at a distance from the walls, the grate may be circular or of any other convenient or elegant form, and is to be surrounded and enclosed with a frame work of materials and construction similar to those of 5 the screen above described. Over this surrounding screen, and in contact with it, is placed a top or canopy of metal, or other proper material, from which proceeds the flue or tube that conveys the smoke. The fire is to be supplied with air by the means already specified under the former head, and by similar arrangement the heat and ventilation of the apartment may be exactly regu- 10 lated. Thirdly, in combination with ordinary grates or in open fire-places, or with register stoves, this Invention is usefully and conveniently applied by placing a diaphanous screen of the construction already described, accurately fitted to the openings in front of such stoves or fire-places, and by supplying the fire with air either from without or from within the apartment by means of 15 the apparatus already specified under the former heads. When employed in this less perfect manner the process of heating the apartment requires a greater consumption of fuel, but in other respects the advantages are similar in kind, if not in the same degree.

In witness whereof, I, the said William Clerk, have hereunto set my 20 hand and seal, this Twenty-second day of October, in the year of our Lord One thousand eight hundred and ten.

WILLIAM CLERK. (L.S.)

Signed, sealed, and delivered (being first
duly stamped) in the presence of

25

ROBT. FERGUSON,

of Nottingham Place, Marylebone, London.

LUCAS SPILSBURY,

of Bawtry, in the County of York, Attorney
at Law.

30

Robert Ferguson, of Nottingham Place, Marylebone, London, Esquire, maketh oath and saith, that he did see William Clerk, mentioned in the deed poll hereunto annexed, sign, seal, and as his act and deed, in due form of law, deliver the said deed poll, in the presence of Lucas Spilsbury, mentioned as a witness in the said deed poll, and this deponent, and that the names, William 35 Clerk, appearing to be set and subscribed at the foot of the said deed poll as

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the party executing the same, and Rob^t Ferguson and Lucas Spilsbury, set and subscribed to the said deed poll as witnesses attesting the due execution of the same, are of the respective handwriting of the said William Clerk, Lucas Spilsbury, and this deponent, Rob^t Ferguson.

5 Sworn at Bawtry, in the County of York, by this deponent, on Monday the Twenty-second day of October, One thousand eight hundred and ten, before me,

LUCAS SPILSBURY,
A Master Extra^{ry} in Chancery.

10 Inrolled the Twenty-sixth day of October, in the year above written.

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Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1854.

